

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1. (Currently amended) A process for treating Alzheimer's disease, comprising the steps of first administering to a human patient ~~an antagonist of a neurotransmitter receptor~~ antagonist which ~~indirectly~~ inhibits phosphorylation of microtubule-associated protein-2, and thereafter administering to said patient an anticholinesterase agent, wherein: (a) said antagonist of said neurotransmitter binds to a neurotransmitter receptor ~~which~~ that leads to the phosphorylation of said microtubule-associated protein-2 in limbic cells, (b) said antagonist of said neurotransmitter binds to and inhibits a neurotransmitter receptor ~~which~~ that leads to the phosphorylation of said ~~microtubule-associated~~ microtubule-associated protein-2 in neocortical cells, and (c) said antagonist binds to said neurotransmitter receptor in said limbic cells at least 1.5 times as much as it binds to said neurotransmitter receptor in said neocortical cells.

Claim 2. (Original) The process as recited in claim 1, wherein said antagonist binds to said neurotransmitter receptor in said limbic cells at least 2.5 times as much as it binds to said neurotransmitter receptor in said neocortical cells.

Claim 3. (Previously amended) The process as recited in claim 2, further comprising the step of measuring the level of said antagonist in the brain of said patient after said step of administering to said human patient said antagonist of said neurotransmitter receptor, and prior to said step of administering said anticholinesterase agent to said patient.

Claim 4. (Currently amended) The process as recited in claim 3, further comprising the steps of making repeated measurements of said level of said antagonist in said brain of said patient after said step of administering to said human patient said antagonist of said neurotransmitter receptor, comparing said level ~~obtained in the most current of said repeated measurements~~ measured at a first point in time with said level ~~obtained in the measurement immediately preceding said most current of said repeated measurements,~~ measured at a second point in time, and performing said step of administering said anticholinesterase agent to said patient when said level ~~obtained in said most current of said repeated measurements~~ measured at said second point in time is less than or equal to said level ~~obtained in said measurement immediately preceding said most current of said repeated measurements~~ measured at said first point in time, wherein said first point in time precedes said second point in time.

Claim 5. (Previously amended) The process as recited in claim 4, further comprising the step of measuring the level of said anticholinesterase in said brain of said patient after said step of administering said anticholinesterase agent to said patient.

Claim 6. (Previously amended) The process as recited in claim 5, further comprising the step of administering said antagonist to said patient after said step of measuring said level of said anticholinesterase in said brain of said patient.

Claim 7. (Previously amended) The process as recited in claim 6, further comprising the step of administering said anticholinesterase to said patient after said step of measuring said level of said anticholinesterase in said brain of said patient.

Claim 8. (Previously amended) The process as recited in claim 7, wherein said step of determining said level of said antagonist and said step of determining said level of said anticholinesterase is conducted by a sensor.

Claim 9. (Currently Amended) The process as recited in claim 8, wherein said sensor is an implantable sensor.

Claim 10. (Withdrawn) A device for treating Alzheimer's disease, comprising means for administering to a human patient an antagonist of a neurotransmitter receptor which indirectly inhibits phosphorylation of microtubule-associated protein-2, and means for thereafter administering to said patient and anticholinesterase agent, wherein: (a) said antagonist of said neurotransmitter binds to a neurotransmitter receptor which phosphorylates said microtubule-associated protein-2 in limbic cells, (b) said antagonist of said neurotransmitter binds to a neurotransmitter receptor which phosphorylates microtubule-associated protein-2 in neocortical cells, and (c) said antagonist binds to said neurotransmitter receptor in said limbic cells at least 1.5 times as much as it binds to said neurotransmitter receptor in said neocortical cells.

Claim 11. (Withdrawn) The device as recited in claim 10, wherein said device is comprised of a time-release capsule.

Claim 12. (Withdrawn) The device as recited in claim 10, wherein said device is comprised of a time-release tablet.

Claim 13. (Withdrawn) The device as recited in claim 10, wherein said device is comprised of a semi-rigid implant.

Claim 14. (Withdrawn) The device as recited in claim 10, wherein said device is comprised of an implanted pump.

Claim 15. (Withdrawn) The device as recited in claim 10, wherein said device is comprised of a sensor for detecting the concentration of said antagonist in a human brain.

Claim 16. (Withdrawn) The device as recited in claim 15, wherein said sensor for detecting the concentration of antagonist in a human brain is an implantable sensor.

Claim 17. (Withdrawn) The device as recited in claim 16, wherein said device is comprised of a sensor for detecting the concentration of said anticholinesterase within a human brain.

Claim 18. (Withdrawn) The device as recited in claim 17, wherein said sensor for detecting the concentration of said anticholinesterase within said human brain is an implantable sensor.

Claim 19. (Withdrawn) The device as recited in claim 10, wherein said device is comprised of an electronically-controlled drug-delivery system.